



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/253,638	02/19/1999	KEISUKE OGURO	1217-990257	5855

7590 10/30/2002  
RUSSELL D ORKIN  
700 KOPPERS BLDG  
436 SEVENTH AVENUE  
PITTSBURGH, PA 152191818

EXAMINER

ZITOMER, FRED

ART UNIT	PAPER NUMBER
----------	--------------

1713

DATE MAILED: 10/30/2002

2/

Please find below and/or attached an Office communication concerning this application or proceeding.



# Office Action Summary

Application No.

09/253,638

Applicant(s)

Oguro et al.

Examiner

Fred Zitomer

Art Unit

1713



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Aug 20, 2002
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above, claim(s) 2-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 8, and 9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:



Art Unit: 1713

1.

This responds to the communication of August 20, 2002. The rejection of record under 35 U.S.C. 103(a) over Shahinpoor et al, WO 97/26039, alone or taken with Nidola et al. is maintained for claims 1,8, and 9 as stated below. No claim is allowed.

2.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3.

Claims 1, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shahinpoor et al, WO 97/26039, alone or taken with Nidola et al., US 4364,803.

Shahinpoor teaches preparing polymeric actuators by conducting present steps (i) to (iii) [page 3, line 24 - page 7, line 18]. The options of changing the order and/or repeating steps corresponding to present steps (ii) to (iii) are disclosed [see e.g. page 7, lines 12-13; page 6, lines 8-11; page 5, lines 6-30; claim 82]. Nidola teaches controlling the amount of metal deposited on the surface of ion exchange resins during reductive deposition, i.e. present step (i), by repeating the step of adsorbing metal complexes [Abstract, paragraph 3; column 5, lines 1-14; Example 1]. Shahinpoor differs from the instant invention by not disclosing that the step of adsorbing metal complexes can be repeated.

It would have been obvious to repeat the step of allowing an ion exchange resin to adsorb a metal complex because it is well settled that a result oriented variable implemented within the



Art Unit: 1713

skill of the art to solve a known problem in a known process is obvious absent the showing of a new or unexpected result. *In re Boesch*, 205 USPQ 215. In the present case it is generally known to regulate the amount of metal deposited by controlling parameters such as concentration, contact time, temperature, and the number of cycles.

In the alternative, it would have been obvious to control the amount of metal deposited on an ion exchange resin by repeating the metal complex absorption step because Nidola teaches the embodiment for depositing the same metals on the same ion exchange resins as Shahinpoor.

4.

Applicant's arguments filed August 20, 2002 have been fully considered but they are not persuasive.

The argument that the references fail to teach repeating the instant processing steps has been addressed in prior Office actions. See for example Paper No. 17 at Section 5 for a reply.

Applicant states that neither Shahinpoor nor Nidola teach or suggest the limitation to the amended claims that the deposition of metal extends to the interior of the ion exchange resin near the surface. This is not compelling for at least the following reasons:

- the amendment to the claims is written in functional language too indefinite to meaningfully limit the claims. The recitation "...in the interior near the surface." is a relative expression suitable at best for extending the preamble but too indefinite to further limit the claim.
- nothing on this record in evidentiary form shows that metal is deposited to greater depths versus Shahinpoor or Nidola when comparable amounts of metal are deposited.



Art Unit: 1713

- contrary to the assertion that nothing in the references teaches or suggests that the metal electrode is deposited in the interior of the ion exchange resin it is noted that Nidola clearly teaches both adsorption, i.e. surface deposition, and absorption, i.e. penetration below the surface, of the metal [column 5, lines 1-14].

5.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

6.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred Zitomer whose telephone number is (703) 308-2461. The examiner can normally be reached Monday through Friday from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful David Wu can be reached at (703) 308-2450. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 (before final) and (703) 872-9311 (after final).



Application/Control Number: 09/253,638

Page 5

Art Unit: 1713

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2351.



FRED ZITOMER, PhD  
PRIMARY EXAMINER  
ART UNIT 1713

Zitomer/fz  
October 29, 2002